

## COPPER GOLD PORPHYRY TARGETS DEFINED AT ESK PROJECT

### ASX Code: AIV

### Issued Capital

215,502,577 ordinary shares (AIV)

### Market Capitalisation

\$5.38M (22<sup>nd</sup> May 2023, \$0.025)

### Directors

Min Yang (Chairman, NED)  
Mark Deriman (Managing Director)  
Geoff Baker (NED)  
Dongmei Ye (NED)  
Andrew Bald (NED)

### About ActivEX

ActivEX Limited is a minerals exploration company committed to the acquisition, identification, and delineation of new resource projects through active exploration.

The ActivEX portfolio is focused on gold copper and critical metal projects, with substantial tenement packages in the north and southeast Queensland.

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## COPPER GOLD PORPHYRY TARGETS DEFINED AT BOOUBYJAN IN ESK PROJECT

23<sup>rd</sup> May 2023

### Highlights

- *Recent work by Rama has delineated four untested resistive/conductive porphyry targets within the Boobyjan from the Dipole-Dipole Induced Polarisation (DDIP) surveys with RC/Core drilling being considered to test these DDIP targets. P*
- *Re-processing of the 2001 and 2006 DDIP by Rama Geoscience at Boobyjan shows that the main Boobyjan porphyry complex is defined by a central resistive core with a strongly chargeable halo corresponding to the porphyry model of a silica-rich core and an alteration halo of clays and pyrite.*
- *The Coalstoun Porphyry System is yet to be reviewed in detail.*

**ActivEX Limited (ASX: AIV) (ActivEX or the Company)** is pleased to announce that RAMA Geoscience has completed the high level reprocessing of the Coalstoun and Boobyjan Porphyry Systems in Esk Gold and Copper Project, SE Queensland which was followed up with a more detailed review of the Boobyjan Porphyry System to look for significant portions of the Porphyry System at Boobyjan that has not been drill tested and so remains unexplored (**Figure 3**).

A total of seven Cu Au Porphyry targets have been delineated at the Boobyjan Prospect in the SE of the tenements and three targets at the Kalpapo Target in the NW of the tenement. A selection of the Porphyry Drill Targets are summarised in this Announcement.

**ActivEX Managing Director, Mark Derriman, commented:** *“Reprocessing of the Boobyjan IP surveys by RAMA Geoscience is the first major significant review of the Boobyjan Porphyry System in a decade. Historical drilling has not adequately tested the resistive core of the porphyry mineral system as clearly shown in **Figure 3**. The work by RAMA Geoscience has delineated four high quality porphyry copper gold targets that warrant drill testing”.*

## PORPHYRY DRILL TARGETS

### 1. ABJ014 (Figure 4)

ABJ014 is a 923m hole in the middle of the porphyry complex and is mineralised. The hole gets close to the high resistivity core (blue shells) and just clips the central NS chargeability feature.

Mineralisation appears to start once the 500  $\Omega$ m shell is reached, confirming the interpretation that the porphyry is represented by a resistive core.

Possible target: This section shows that the highest resistivity zone does not appear to have been tested (pink circle). This is a target zone for additional porphyry mineralisation.

### 2. ABJ004 (Figure 5)

ABJ004 is drilled on the SW corner of the rhomboid shaped chargeability halo surrounding the Boobyjan porphyry complex. There are extensive intersections of Fe and S in this hole, however only low Cu suggesting that the chargeability response is from the pyritic halo around the porphyry.

The section clearly shows that the strongest chargeability shells have not been intersected by ABJ004 (even allowing for the discrepancy in topography between the collar coordinates and the IP data). The deeper strong chargeability response is a possible target

## Induced Polarisation Method

Induced polarization, or IP, is a measure of a delayed voltage response in earth materials. The IP effect is caused by a current-induced electron transfer reaction between electrolyte ions and metallic-luster minerals. IP is a low frequency measurement of the electrical energy storage capacity of the earth. By passing an induced current into the ground and measuring the change in voltage with respect to time, or changes in phase at a given frequency with respect to a reference phase, the IP effect can be determined.

To produce an IP effect, fluid-filled pores must be present since the rock matrix is an insulator. The IP effect becomes evident when these pore spaces are in contact with metallic-luster minerals, graphite, clays, or other alteration products. IP effects make the apparent resistivity of the host rock change with frequency -- the rock resistivity decreases as the measurement frequency increases.

The Tx electrode is a 1-metre-long x 150mm x 5mm mild steel plate that is buried at about 200mm deep and soaked in with water. These are picked up after the dirt is put back into the hole. After the first rain shower it was difficult to find the Tx location. The receiver pots are coffee cup size and are buried into a mud slurry, these leave a small round hole about 100mm deep after use.

**Background ESK Project Summary**

The Esk Copper and Gold project is hosted to mineralisation with similarities to many High-K Calc-alkalic to Alkalic Porphyry copper-gold deposits, near-surface supergene copper deposits, as well as the potential for breccia-pipe hosted gold-copper deposits.

CSAMT profiling indicates a favourable geological zone, located 150 metres below the current drilling depth, may host significant mineralisation, marked by a horizon of conductivity. Repetitive vertical zones of mineralisation are well known in other deposits (e.g., Cracow and Pajingo) which are located in close proximity and could expand the deposit's resource potential by several orders of magnitude. The conductive zone is ActivEX Limited's highest-priority exploration target.

Outcropping, epithermal-style veins have also been identified elsewhere in the project area, namely the Penwhaupell and Aranbanga prospects. Exploration at these prospects has been limited to rock chip sampling, geological mapping, and a small amount of drilling, thus significant potential remains.

Furthermore, the presence of three known, gold, and silver veins within the project is a strong indication of the mineralisation potential of the system. The regional area remains under-explored, with very little work having been completed outside of the main prospects. Therefore, significant potential exists to locate additional mineralised veins

Significant drilling intersections from the Coalstoun porphyry include:

- 453.4m at 0.24% copper from 203.9m to EOH (CDD003)
- 199.1m at 0.36% copper from 17.1 to EOH (ESSO12)
- 390.7m at 0.30% copper from 0m to EOH (ESSO22)
- 407.8m at 0.27% copper from 36.6m to EOH (ESSO32)

Substantial drilling has been completed at the Barambah Main Vein and resource calculations have been announced in 2015. Significant intersections include:

- 2m @ 15.96 g/t Au and 1556 g/t Ag
- 17.15m @ 4.98g/t Au and 118 g/t Ag
- 25m @ 0.61 g/t Au and 208 g/t Ag

Significant drilling intersections from the White Horse prospect on the Boobyjan EPM include:

- 290m at 0.13% copper from 180m incl. 30m at 0.36% Cu (ABJ014)
- 26m at 0.85% copper from 21m (ABJ020)
- 28m at 0.96% copper from 29m incl. 17m at 1.4% copper from 32m (ABJ021)
- 15m at 1.09% copper from 29 metres (ABJ023)
- 13m at 1% copper from 27 metres (ABJ025)
- 30m at 0.53% copper from 1 metre (ABJ027)
- 38m at 0.74% copper from 20m (BRAPD12)

23<sup>rd</sup> May 2023**Exploration targeting for the ESK Project includes:**

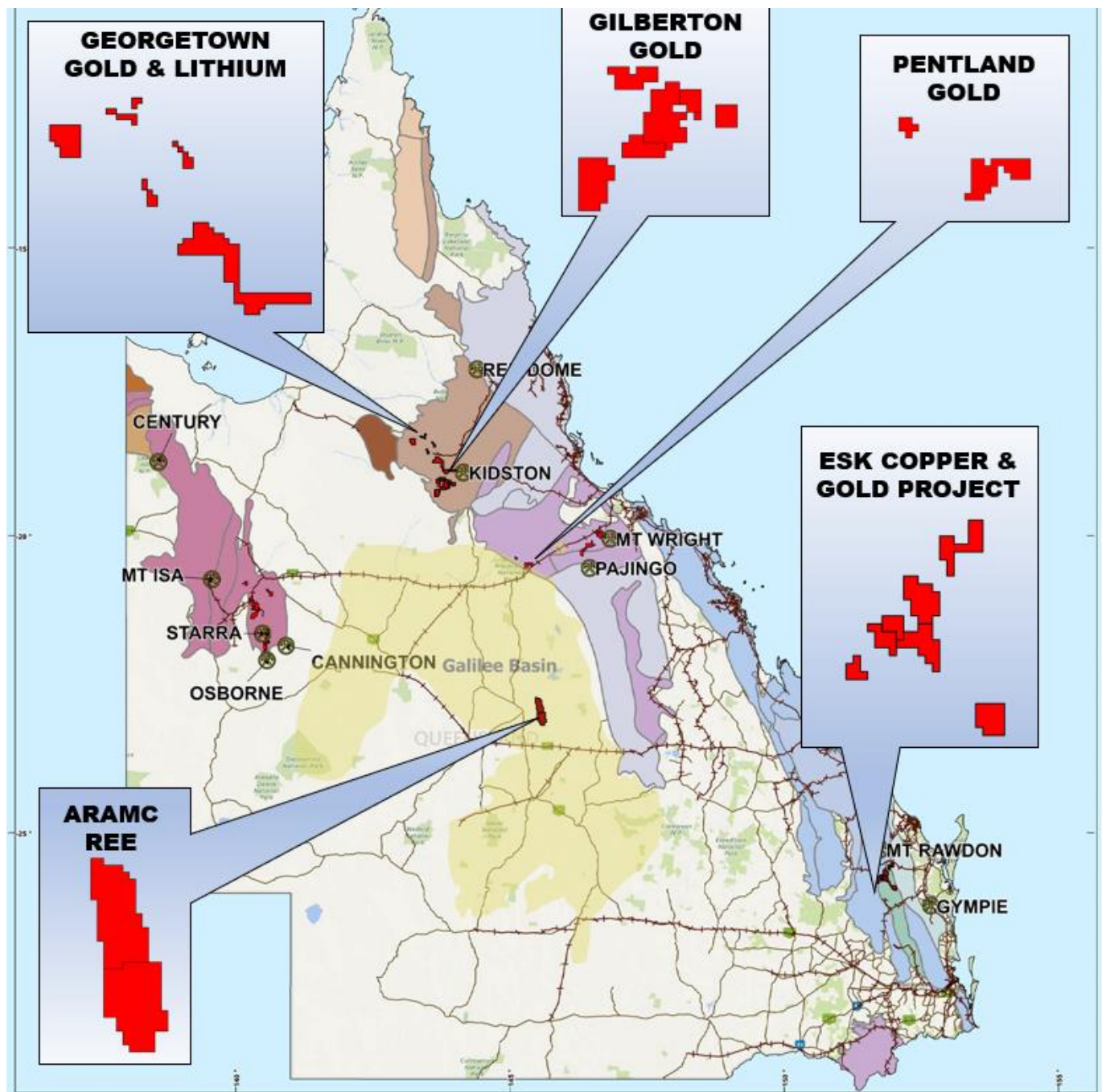
- Potential to significantly extend and upgrade shallow high-grade supergene copper mineralisation;
- The shallow epithermal gold potential associated with the SE Breccias in Coalstoun Lakes EPM;
- Potential to discover copper mineralisation at depth for Cadia-style mineralisation;
- Deep porphyry and proximal high-grade gold breccia potential (Mt Rawdon style) of the SE Breccias; and
- Porphyry gold/copper potential of the Staib's Hill rhyolite/dome
- Potential to discover copper mineralisation at depth below the White Horse supergene copper and for analogous Coalstoun/Cadia style mineralisation;
- Deep porphyry and proximal high-grade gold breccia potential (Mt Rawdon style) of the SE Breccias; and
- Porphyry gold/copper potential of the Staib's Hill rhyolite/dome

**This announcement is authorized by the Board of ActivEX Limited****For further information, contact:  
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**ACTIVEX LIMITED**

**Legend**

- Town
- Road
- Railway

**Tectonic Province**

- Savannah / Iron Range Province
- Murphy / Western / Kalkadoon-Ewen / Eastern Province
- Hogkinson / Broken River / Clarke River Province
- Etheridge Province
- Croydon Province
- Cape River / Anakie / Thalanga Province
- New England Orogen

**ACTIVEX QUEENSLAND TENEMENTS**



**Figure 1.** ActivEX Limited Queensland Projects and tenements



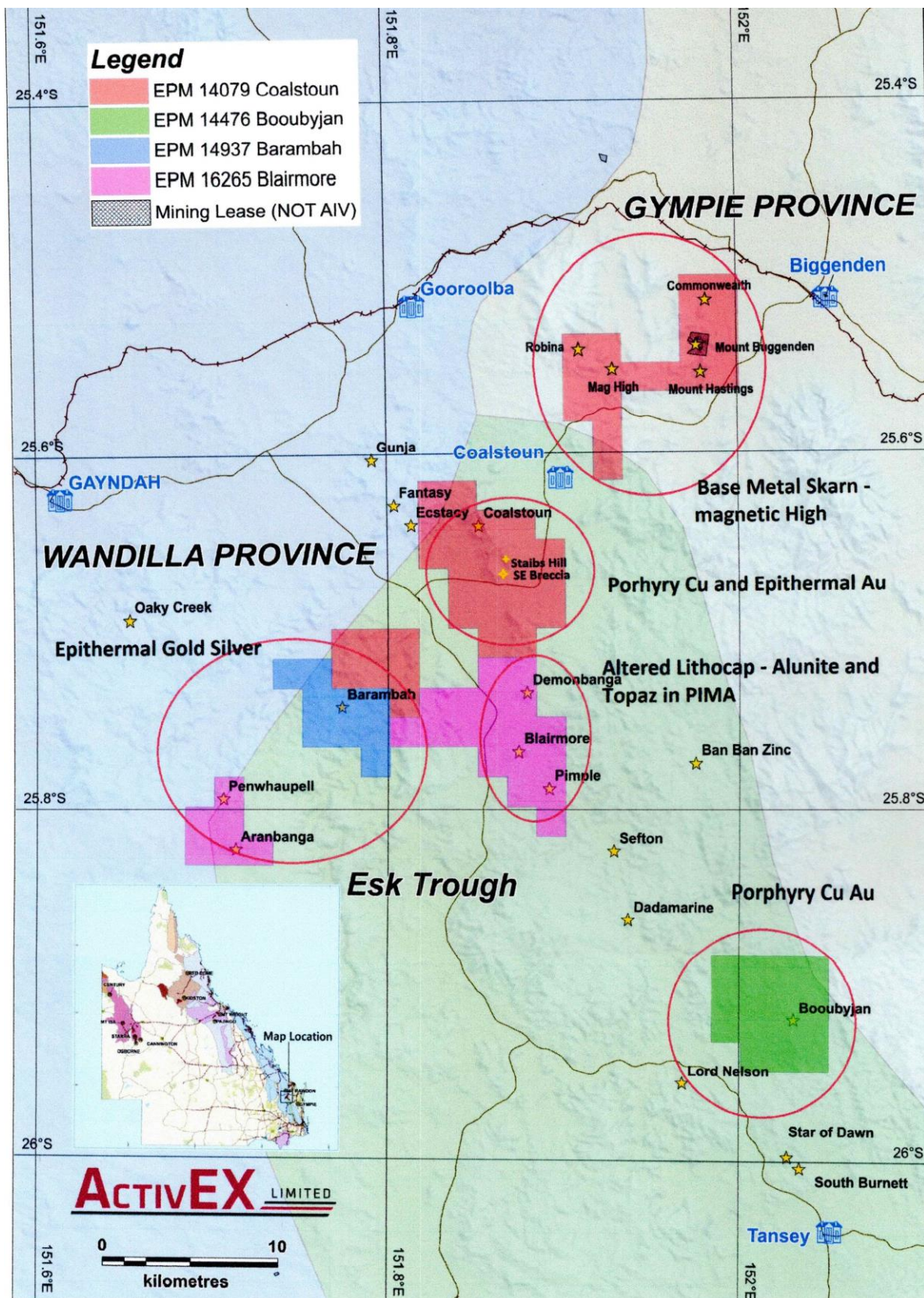
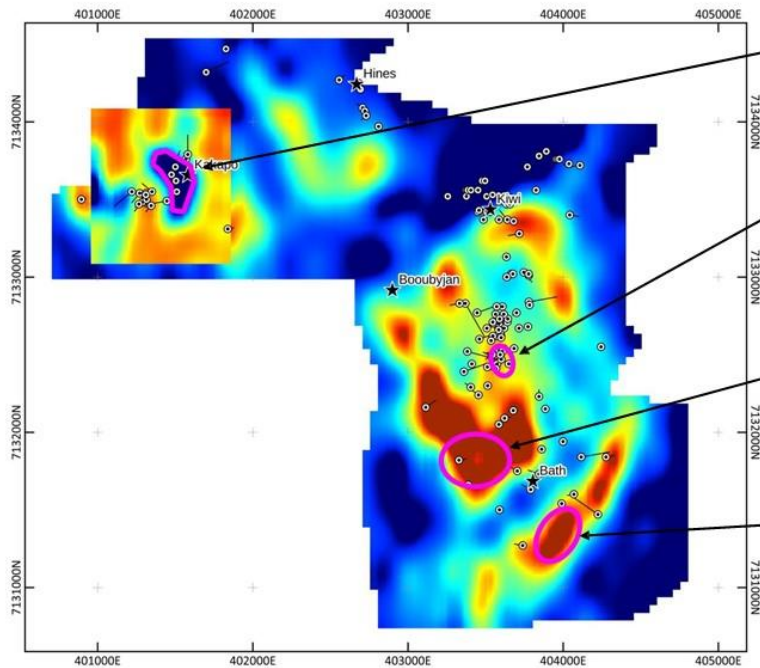


Figure 2. Esk Project showing the major projects and tenure



23<sup>rd</sup> May 2023

## Boobyjan / Kakapo – Drilling results compared to IP results. Possible Targets



Boobyjan - Depth slice at 175m through the 3D Inverted Chargeability  
Kakapo - Depth slice at 175m through the 3D Inverted Resistivity

### Possible Targets

#### Kakapo

Resistive core - The resistivity anomaly is interpreted as being related to the silica rich core of the porphyry system. Existing drilling is not deep enough to properly test the resistive core. Hence this deeper zone is a target for deeper drilling (250-300m).

#### Boobyjan

Resistive core - The central resistivity is again interpreted as the silica rich core of the porphyry system. The most resistive part of the anomaly at Boobyjan has not been tested by existing drilling. This is a target zone from 350 to 400m deep for additional porphyry mineralisation.

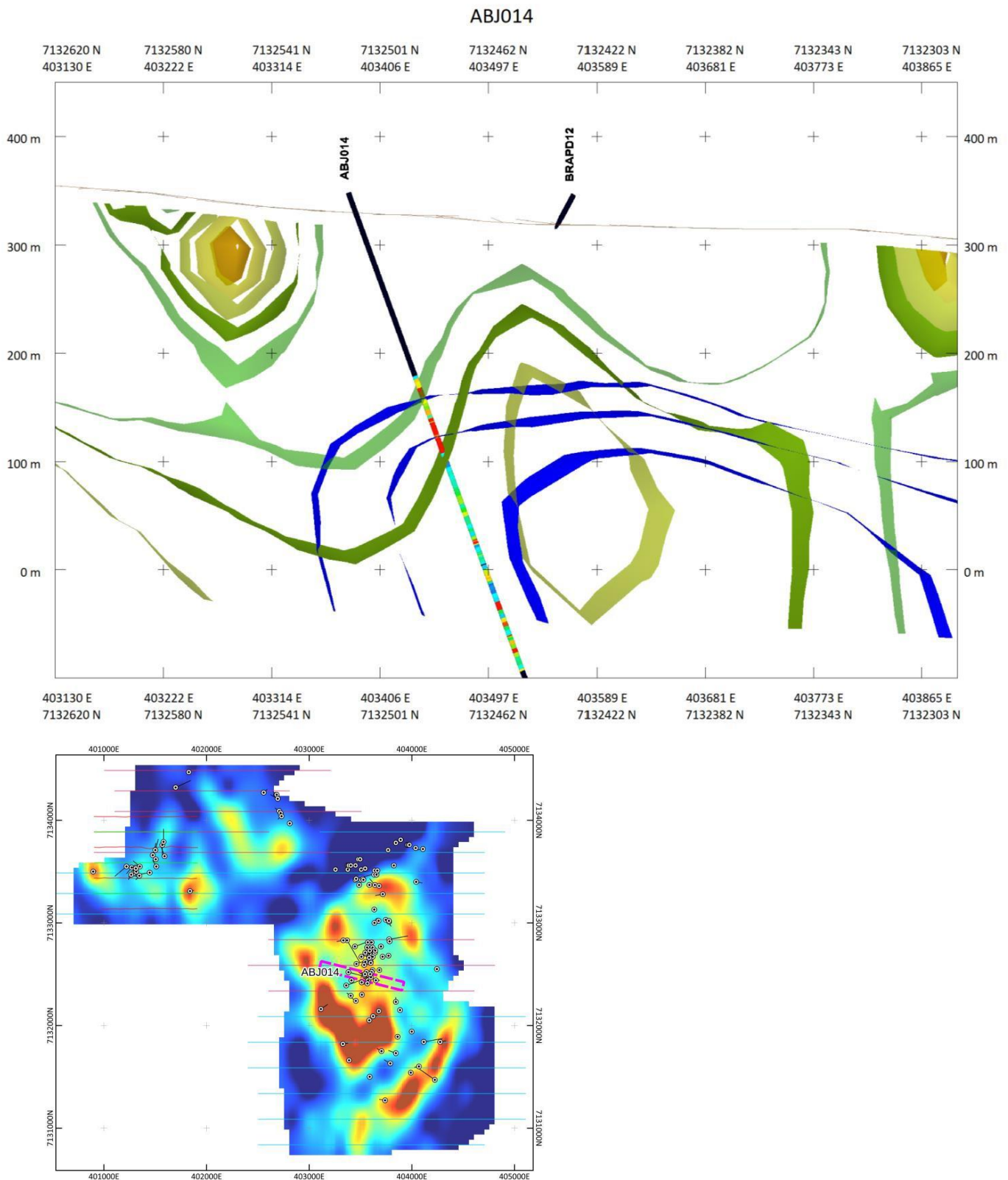
#### Boobyjan South

Deep chargeability zone - Existing drill has not tested the strongest part of the chargeability zone at depth (250-300m). The deeper strong chargeability response is a possible target, although the expectation is that this is primarily related to the pyrite halo around the porphyry complex.

#### South of Bath

ABJ015 is drilled in the lowest amplitude part of the NE trending chargeability high and intersected Cu, Fe, and S mineralisation. The highest chargeability response to the SW of ABJ015 on this NE chargeability trend has not been tested by drilling and is a target for sulphide mineralisation (depth 150-250m). This NE trend is also a magnetic high.

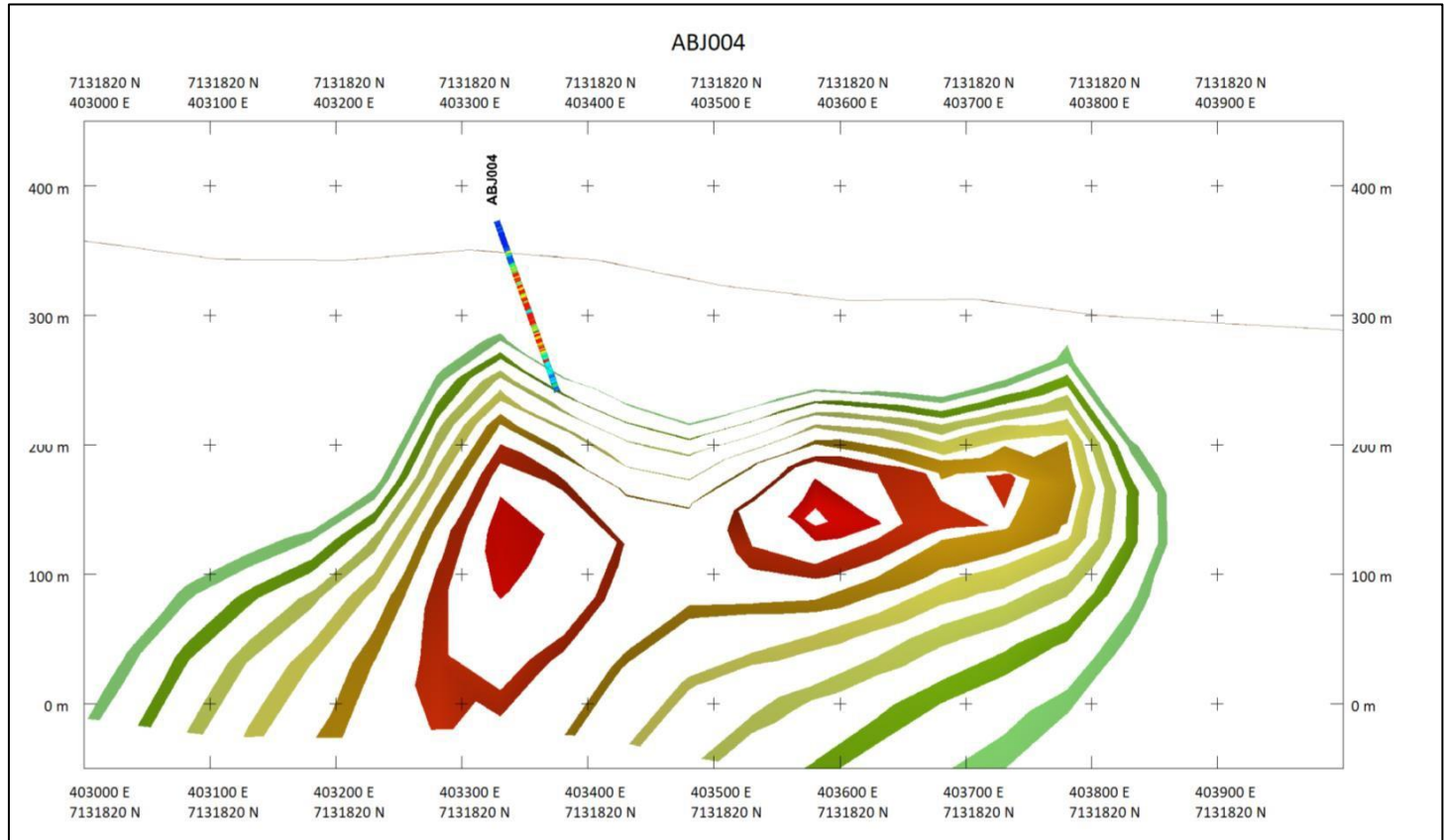
**Figure 3.** Esk Project showing the major projects and tenure



**Figure 4** Section through holes ABJ003 and ABJ012. Green to brown shells are 3D inverted chargeability (15.0 to 25.0 mV/V). Blue shell is 3D inverted resistivity – 300  $\Omega$ m). Drill trace coloured Fe(iron-red > 5%).



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**Figure 5** Section through hole ABJ004. Shells are 3D inverted chargeability (15.0 to 30.0 mV/V). Drill trace coloured by S (Sulphur).

## Declarations under 2012 JORC Code and JORC Tables

The information in this report which relates to Exploration Results is based on information reviewed by Mr. Mark Derriman, who is a member of The Australian Institute of Geoscientists (1566) and Mr. Xusheng Ke, who is a Member of the Australasian Institute of Mining and Metallurgy (310766) and a Member of the Australian Institute of Geoscientists (6297).

Mr. Mark Derriman and Mr. Xusheng Ke have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Mr. Mark Derriman and Mr. Xusheng Ke consent to the inclusion of their name in this report and to the issue of this report in the form and context in which it appears.

## Previous Disclosure – 2012 JORC Code

Information relating to Mineral Resources, Exploration Targets and Exploration Data associated with previous disclosures relating to the Esk Copper and Gold Project in this report has been extracted from the following ASX Announcements:

- ASX announcement titled “Barambah Gold-Silver Deposit Maiden Inferred Mineral Resource” dated 13<sup>th</sup> February 2015.
- ASX announcement titled “Coalstoun Copper Deposit Maiden Inferred Mineral Resources” dated 31<sup>st</sup> March 2015

Copies of reports are available to view on the ActivEX Limited website [www.activex.com.au](http://www.activex.com.au). These reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market